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DATE: Saturday, April 16, 2005

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		<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L6	US-4663490-A.did.	1
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L5	L4 and concentrat\$3 with (aqueous near1 phase or sulfuric acid)	8
<input type="checkbox"/>	L4	L3 and nitric acid and sulfuric acid	12
<input type="checkbox"/>	L3	L2 and dinitrotoluene	14
<input type="checkbox"/>	L2	L1 and toluene	16
<input type="checkbox"/>	L1	two near1 stage nitration	29

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NEWS 3 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks  
(ROSPATENT) added to list of core patent offices covered  
NEWS 4 FEB 28 PATDPAFULL - New display fields provide for legal status  
data from INPADOC  
NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available  
NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded  
NEWS 7 MAR 02 GBFULL: New full-text patent database on STN  
NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced  
NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 10 MAR 22 KOREAPAT now updated monthly; patent information enhanced  
NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY  
NEWS 12 MAR 22 PATDPASPC - New patent database available  
NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags  
NEWS 14 APR 04 EPFULL enhanced with additional patent information and new  
fields  
NEWS 15 APR 04 EMBASE - Database reloaded and enhanced  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
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FILE COVERS 1907 - 16 Apr 2005 VOL 142 ISS 17  
FILE LAST UPDATED: 15 Apr 2005 (20050415/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s nitrat? (L) toluene (l) dinitrotoluene

298442 NITRAT?  
156926 TOLUENE  
1492 TOLUENES  
157477 TOLUENE  
(TOLUENE OR TOLUENES)  
3855 DINITROTOLUENE  
248 DINITROTOLUENES  
3930 DINITROTOLUENE  
(DINITROTOLUENE OR DINITROTOLUENES)  
L1 115 NITRAT? (L) TOLUENE (L) DINITROTOLUENE

=> s l1 and nitric acid and sulfuric acid

155288 NITRIC  
3 NITRICS  
155291 NITRIC  
(NITRIC OR NITRICS)  
3964016 ACID  
1472330 ACIDS  
4441025 ACID  
(ACID OR ACIDS)  
60509 NITRIC ACID  
(NITRIC(W)ACID)  
126095 SULFURIC  
3964016 ACID  
1472330 ACIDS  
4441025 ACID  
(ACID OR ACIDS)  
122934 SULFURIC ACID  
(SULFURIC(W)ACID)  
L2 26 L1 AND NITRIC ACID AND SULFURIC ACID

=> s l2 and (two (1a) stage nitration or two (1a) nitration)

1995757 TWO  
31 TWOS  
1995782 TWO  
(TWO OR TWOS)  
378826 STAGE  
257659 STAGES  
570583 STAGE  
(STAGE OR STAGES)  
28664 NITRATION  
463 NITRATIONS  
28718 NITRATION  
(NITRATION OR NITRATIONS)  
36 STAGE NITRATION  
(STAGE(W)NITRATION)  
11 TWO (1A) STAGE NITRATION  
1995757 TWO  
31 TWOS

1995782 TWO

(TWO OR TWOS)

28664 NITRATION

463 NITRATIONS

28718 NITRATION

(NITRATION OR NITRATIONS)

71 TWO (1A) NITRATION

L3 3 L2 AND (TWO (1A) STAGE NITRATION OR TWO (1A) NITRATION)

=> d 13 ibib ab 1-3

L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:738349 CAPLUS

DOCUMENT NUMBER: 141:245230

TITLE: **Two-stage nitration**

process for the production of **dinitrotoluene**  
from **toluene**

INVENTOR(S): Dieterich, Erwin; Hielscher, Anke; Keggenhoff,  
Berthold; Keller-Killewald, Manfred; Muennig, Juergen;  
Wastian, Dietmar

PATENT ASSIGNEE(S): Bayer Ag, Germany

SOURCE: Ger. Offen., 13 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10307140	A1	20040909	DE 2003-10307140	20030220
EP 1508563	A1	20050223	EP 2004-2754	20040207
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004267061	A1	20041230	US 2004-780266	20040217
JP 2004250452	A2	20040909	JP 2004-43476	20040219
PRIORITY APPLN. INFO.:			DE 2003-10307140	A 20030220

AB A procedure is described for the preparation of **dinitrotoluene** by a **two-stage nitration** of **toluene** in which: (A) in a first stage **toluene** is adiabatically **nitratd** with **nitric acid** and the **toluene** is **nitrated** to  $\geq 90\%$  and where  $\leq 50\%$  of the assigned **toluene** is converted into **dinitrotoluene**, subsequently the mono nitrotoluene-containing organic phase and the aqueous **sulfuric acid**-containing acid phase are separated, the aqueous **sulfuric acid**-containing acid phase is subjected to flash evaporation, concentrated, and the concentrated **sulfuric acid** recoved is lead back into the reaction of the first stage and/or the reaction of the second stage; and isothermally completely converts (b) in a second stage the mononitrotoluene-containing organic phase from the first stage with **nitrating acid** and the aqueous **sulfuric acid**-containing acid phase is separated by vacuum evaporation, concentrated, and the recovered concentrated **sulfuric acid** is recycled to the first stage and/or the second stage. Process flow diagrams are presented.

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:555376 CAPLUS

DOCUMENT NUMBER: 136:294589

TITLE: Studies on the development of a method for obtaining  
mono- and dinitrotoluene without use of  
**sulfuric acid** and other water  
binding media

AUTHOR(S): Ziolk, Mieczyslaw; Wielgat, Jerzy; Matys, Zygmunt;  
Glanowska, Ewa

CORPORATE SOURCE: Inst. Przemyslu Organicznego, Warsaw, 03-236, Pol.

SOURCE: Organika (2001), Volume Date 1999-2000 109-120

CODEN: ORGAD2; ISSN: 0137-9933

PUBLISHER: Instytut Przemyslu Organicznego

DOCUMENT TYPE: Journal  
LANGUAGE: Polish  
OTHER SOURCE(S): CASREACT 136:294589

AB The technol. of obtaining mononitrotoluene and **dinitrotoluene** by a, periodic and by a continuous method has been developed. Resulted MNT has a low content of DNT (below 0.15%) as its characteristic feature and it does not contain unprocessed **toluene**. **Dinitrotoluene** obtained as a result of **two-stage nitration** does not contain trinitrotoluene, and the content of MNT is minimal (approx. 0.01%). Efficiency of the described process varies between 96-97%.

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:254271 CAPLUS

DOCUMENT NUMBER: 124:288975

TITLE: **Two-step nitration** process for the preparation of dinitrotoluene isomer mixtures having reduced ortho-isomer content

INVENTOR(S): Klingler, Uwe; Schieb, Thomas; Wiechers, Gerhard; Zimmermann, Juergen

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Eur. Pat. Appl., 4 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 696571	A2	19960214	EP 1995-111996	19950731
EP 696571	A3	19980610		
EP 696571	B1	20000126		
R: BE, DE, ES, FR, GB, IT, NL				
DE 4428462	A1	19960215	DE 1994-4428462	19940811
ES 2144074	T3	20000601	ES 1995-111996	19950731
US 5689018	A	19971118	US 1995-510803	19950803
CA 2155562	AA	19960212	CA 1995-2155562	19950807
JP 08059565	A2	19960305	JP 1995-222793	19950809
JP 3631814	B2	20050323		
BR 9503612	A	19960430	BR 1995-3612	19950810
CN 1121507	A	19960501	CN 1995-109295	19950811
CN 1075054	B	20011121		

PRIORITY APPLN. INFO.: DE 1994-4428462 A 19940811

OTHER SOURCE(S): CASREACT 124:288975

AB Dinitrotoluene isomer mixts., useful as TDI precursors (no data), which have reduced ortho-isomer content (e.g., 4.0-4.1%), are prepared via the 2-step nitration of PhMe with HNO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub> in which the second nitration step is conducted under adiabatic conditions.